```
att gag cgg gat gca gct ctt gca gaa aac gcc gga gtc gat att ctt    1346
Ile Glu Arg Asp Ala Ala Leu Ala Glu Asn Ala Gly Val Asp Ile Leu
        355                 360                 365

ttt acg cca gat gct cat gat atg tat ccc ggt gaa aag aat gtc acg    1394
Phe Thr Pro Asp Ala His Asp Met Tyr Pro Gly Glu Lys Asn Val Thr
        370                 375                 380

att cat gta gaa aga cgc aca gac gtg tta tgc ggg cgc tca aga gaa    1442
Ile His Val Glu Arg Arg Thr Asp Val Leu Cys Gly Arg Ser Arg Glu
    385                 390                 395

gga cat ttt gac ggg gtc gcg atc gta ctg acg aag ctt ttc aat cta    1490
Gly His Phe Asp Gly Val Ala Ile Val Leu Thr Lys Leu Phe Asn Leu
400                 405                 410                 415

gtc aag ccg act cgt gcc tat ttc ggt tta aaa gat gcg cag cag gta    1538
Val Lys Pro Thr Arg Ala Tyr Phe Gly Leu Lys Asp Ala Gln Gln Val
                420                 425                 430

gct gtt gtt gat ggg tta atc agc gac ttc ttc atg gat att gaa ttg    1586
Ala Val Val Asp Gly Leu Ile Ser Asp Phe Phe Met Asp Ile Glu Leu
            435                 440                 445

gtt cct gtc gat acg gtc aga gag gaa gac ggc tta gcc aaa agc tct    1634
Val Pro Val Asp Thr Val Arg Glu Glu Asp Gly Leu Ala Lys Ser Ser
        450                 455                 460

cgc aat gta tac tta aca gct gag gaa aga aaa gaa gcg cct aag ctg    1682
Arg Asn Val Tyr Leu Thr Ala Glu Glu Arg Lys Glu Ala Pro Lys Leu
    465                 470                 475

tat cgg gcc ctt caa aca agt gcg gaa ctt gtc caa gcc ggt gaa aga    1730
Tyr Arg Ala Leu Gln Thr Ser Ala Glu Leu Val Gln Ala Gly Glu Arg
480                 485                 490                 495

gat cct gaa gcg gtg ata aaa gct gca aaa gat atc att gaa acg act    1778
Asp Pro Glu Ala Val Ile Lys Ala Ala Lys Asp Ile Ile Glu Thr Thr
                500                 505                 510

agc gga acc ata gac tat gta gag ctt tat tcc tat ccg gaa ctc gag    1826
Ser Gly Thr Ile Asp Tyr Val Glu Leu Tyr Ser Tyr Pro Glu Leu Glu
                515                 520                 525

cct gtg aat gaa att gct gga aag atg att ctc gct gtt gca gtt gct    1874
Pro Val Asn Glu Ile Ala Gly Lys Met Ile Leu Ala Val Ala Val Ala
        530                 535                 540

ttt tca aaa gcg cgt tta ata gat aat atc att att gat att cga gaa    1922
Phe Ser Lys Ala Arg Leu Ile Asp Asn Ile Ile Ile Asp Ile Arg Glu
        545                 550                 555

atg gag aga ata taat atg tat cga aca atg atg agc ggc aaa ctt cac    1971
Met Glu Arg Ile     Met Tyr Arg Thr Met Met Ser Gly Lys Leu His
560                     565                 570

agg gca act gtt acg gaa gca aac ctg aac tat gtg gga agc att aca    2019
Arg Ala Thr Val Thr Glu Ala Asn Leu Asn Tyr Val Gly Ser Ile Thr
575                 580                 585                 590

att gat gaa gat ctc att gat gct gtg gga atg ctt cct aat gaa aaa    2067
```

```
Ile Asp Glu Asp Leu Ile Asp Ala Val Gly Met Leu Pro Asn Glu Lys
            595             600             605
```

```
gta caa att gtg aat aat aat aat gga gca cgt ctt gaa acg tat att  2115
Val Gln Ile Val Asn Asn Asn Asn Gly Ala Arg Leu Glu Thr Tyr Ile
            610             615             620
```

```
att cct ggt aaa cgg gga agc ggc gtc ata tgc tta aac ggt gca gcc  2163
Ile Pro Gly Lys Arg Gly Ser Gly Val Ile Cys Leu Asn Gly Ala Ala
            625             630             635
```

```
gca cgc ctt gtg cag gaa gga gat aag gtc att att att tcc tac aaa  2211
Ala Arg Leu Val Gln Glu Gly Asp Lys Val Ile Ile Ile Ser Tyr Lys
            640             645             650
```

```
atg atg tct gat caa gaa gcg gca agc cat gag ccg aaa gtg gct gtt  2259
Met Met Ser Asp Gln Glu Ala Ala Ser His Glu Pro Lys Val Ala Val
655             660             665             670
```

```
ctg aat gat caa aac aaa att gaa caa atg ctg ggg aac gaa cca gcc  2307
Leu Asn Asp Gln Asn Lys Ile Glu Gln Met Leu Gly Asn Glu Pro Ala
            675             680             685
```

```
cgt aca att ttg tagaagaaaa gcccccttta tcggggtttt tcttttaaga tttt  2363
Arg Thr Ile Leu
            690
```

```
<210> 60
<211> 293
<212> PRT
<213> Bacillus subtilis
```

```
<400> 60
Met Ser Ile Ala Val Ser Glu Glu Glu Ala Lys Ala Val Glu Gly Leu
 1               5               10              15
```

```
Asn Asp Tyr Leu Ser Val Glu Glu Val Glu Thr Ile Tyr Ile Pro Leu
            20              25              30
```

```
Val Arg Leu Leu His Leu His Val Lys Ser Ala Ala Glu Arg Asn Lys
            35              40              45
```

```
His Val Asn Val Phe Leu Lys His Pro His Ser Ala Lys Ile Pro Phe
    50              55              60
```

```
Ile Ile Gly Ile Ala Gly Ser Val Ala Val Gly Lys Ser Thr Thr Ala
65              70              75              80
```

```
Arg Ile Leu Gln Lys Leu Leu Ser Arg Leu Pro Asp Arg Pro Lys Val
                85              90              95
```

```
Ser Leu Ile Thr Thr Asp Gly Phe Leu Phe Pro Thr Ala Glu Leu Lys
            100             105             110
```

```
Lys Lys Asn Met Met Ser Arg Lys Gly Phe Pro Glu Ser Tyr Asp Val
        115             120             125
```

```
Lys Ala Leu Leu Glu Phe Leu Asn Asp Leu Lys Ser Gly Lys Asp Ser
    130             135             140
```

```
Val Lys Ala Pro Val Tyr Ser His Leu Thr Tyr Asp Arg Glu Glu Gly
145             150             155                     160

Val Phe Glu Val Val Glu Gln Ala Asp Ile Val Ile Ile Glu Gly Ile
            165             170                     175

Asn Val Leu Gln Ser Pro Thr Leu Glu Asp Asp Arg Glu Asn Pro Arg
        180             185                 190

Ile Phe Val Ser Asp Phe Phe Asp Phe Ser Ile Tyr Val Asp Ala Glu
        195             200                 205

Glu Ser Arg Ile Phe Thr Trp Tyr Leu Glu Arg Phe Arg Leu Leu Arg
    210             215                 220

Glu Thr Ala Phe Gln Asn Pro Asp Ser Tyr Phe His Lys Phe Lys Asp
,225                230                 235                 240

Leu Ser Asp Gln Glu Ala Asp Glu Met Ala Ala Ser Ile Trp Glu Ser
            245             250                 255

Val Asn Arg Pro Asn Leu Tyr Glu Asn Ile Leu Pro Thr Lys Phe Arg
            260             265                 270

Ser Asp Leu Ile Leu Arg Lys Gly Asp Gly His Lys Val Glu Glu Val
        275             280                 285

Leu Val Arg Arg Val
    290


<210> 61
<211> 281
<212> PRT
<213> Bacillus subtilis

<400> 61
Met Glu Gly Leu Asn Asp Tyr Leu Ser Val Glu Glu Val Glu Thr Ile
  1             5               10                  15

Tyr Ile Pro Leu Val Arg Leu Leu His Leu His Val Lys Ser Ala Ala
            20              25                  30

Glu Arg Asn Lys His Val Asn Val Phe Leu Lys His Pro His Ser Ala
        35              40                  45

Lys Ile Pro Phe Ile Ile Gly Ile Ala Gly Ser Val Ala Val Gly Lys
     50              55                  60

Ser Thr Thr Ala Arg Ile Leu Gln Lys Leu Leu Ser Arg Leu Pro Asp
 65              70                  75                  80

Arg Pro Lys Val Ser Leu Ile Thr Thr Asp Gly Phe Leu Phe Pro Thr
                85                  90                  95

Ala Glu Leu Lys Lys Lys Asn Met Met Ser Arg Lys Gly Phe Pro Glu
            100             105                 110

Ser Tyr Asp Val Lys Ala Leu Leu Glu Phe Leu Asn Asp Leu Lys Ser
        115             120                 125
```